Facility Name: RFL INDUSTRIES, INC.

Location: POWERVILLE ROAD BOONTON, NJ

EPA Region: II

Person(s) in Charge of the Facility:

Name of Reviewer: FRANK SORCE Date: 1/31/90

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

In the past an unlined percolation lagoon was used onsite to dispose of pretreated waste waters. Groundwater contamination has resulted from this activity. Certified closure of the lagoon has occurred and recent groundwater monitoring results indicate no detectable levels of contaminants

Scores:

HRS S_M = 14.3 (S_{gw} = 23.86 S_{sw} = 6.56 S_a = 0)

PRO S_M = 14.7 (S_{gw} = 23.86 S_{sw} = 8.95 S_a = 0)

HRS COVER SHEET

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	0 (45)	1	45	45	
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	
4 Waste Characteristics					
Toxicity/Persistence	0 3 6 9 12 (15) 18	1	15	18	15
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 8	1	1	8	1
Total Waste Characteristics Score			16	26	16
5 Targets					
Ground Water Use	0 1 2 (3)	3	9	9	9
Distance to Nearest Well/Population Served	0 4 6 8 (10) 12 16 18 20 24 30 32 35 40	1	10	40	10
Total Targets Score			19	49	19
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			13680	57,330	13680
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 23.86		23.86

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	(0) 45	1	0	45	45
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 (3)	2	6	6	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			11	15	
3 Containment	0 1 2 (3)	1	3	3	
4 Waste Characteristics					
Toxicity/Persistence	0 3 6 9 12 (15) 18	1	15	18	15
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	1	8	1
Total Waste Characteristics Score			16	26	16
5 Targets					
Surface Water Use	0 1 (2) 3	3	6	9	6
Distance to a Sensitive Environment	0 (1) 2 3	2	2	6	2
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	0
Total Targets Score			8	55	8
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			424	64,350	5760
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	6.56		8.95

AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	(0) 45	1	0	45	0
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3			0	35,100	0
5 Divide line 4 by 35,100 and multiply by 100 = S_a			0		0

HRS

	S	S^2
Groundwater Route Score (S_{gw})	23.86	569.3
Surface Water Route Score (S_{sw})	6.56	43.0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		612.3
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		24.7
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		14.3

WORKSHEET FOR COMPUTING S_M

PRO

	S	S^2
Groundwater Route Score (S_{gw})	23.86	569.3
Surface Water Route Score (S_{sw})	8.95	80.1
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		649.4
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		25.5
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		14.7

WORKSHEET FOR COMPUTING S_M